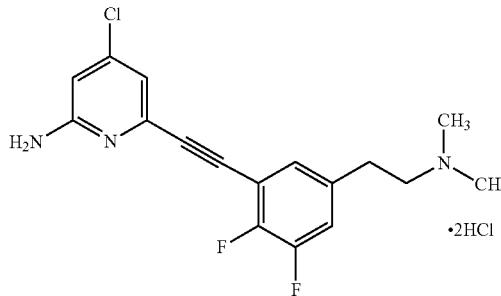


6-(5-(2-(Dimethylamino)ethyl)-2,3-difluorophenyl)-4-methoxypyridin-2-amine hydrochloride  
(66)

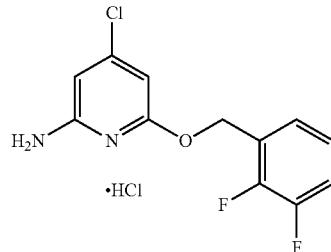
**[0346]** Compound 66 (pale yellow solid, 62 mg, 0.185 mmol, 62%) was prepared from 6-chloro-4-methoxypyridin-2-amine according to General Procedure F.  $^1\text{H}$  NMR (500 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  7.19-7.15 (m, 2H), 6.33 (d,  $J=2.1$  Hz, 1H), 6.26 (d,  $J=1.6$  Hz, 1H), 3.92 (s, 3H), 3.42-3.35 (m, 2H), 3.12-2.99 (m, 6H), 2.95 (s, 6H).  $^{13}\text{C}$  NMR (126 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  172.6, 157.9, 151.6 (dd,  $J_{\text{C}-\text{F}}=247.7$ , 13.4 Hz), 151.3, 149.2 (dd,  $J_{\text{C}-\text{F}}=245.8$ , 13.0 Hz), 134.5 (dd,  $J_{\text{C}-\text{F}}=6.1$ , 4.4 Hz), 130.4 (d,  $J_{\text{C}-\text{F}}=12.6$  Hz), 127.4, 117.3 (d,  $J_{\text{C}-\text{F}}=17.8$  Hz), 105.1, 91.6, 59.4, 57.4, 43.7, 34.0, 30.9, 28.7. LRMS (ESI) Calcd for  $\text{C}_{18}\text{H}_{24}\text{F}_2\text{N}_3\text{O}$  [(M+H) $^+$ ]: 336.19, found: 336.29.



4-Chloro-6-45-(2-(dimethylamino)ethyl)-2,3-difluorophenyl)ethynyl)pyridin-2-amine hydrochloride  
(67)

**[0347]** Compound 67 (brown solid, 142 mg, 0.423 mmol, 65%) was prepared from 2-amino-4,6-dichloropyridine according to General Procedure F.  $^1\text{H}$  NMR (500 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  7.32-7.23 (m, 2H), 6.87 (d,  $J=1.7$  Hz, 1H), 6.63 (d,  $J=1.7$  Hz, 1H), 2.82 (dd,  $J=9.3$ , 6.6 Hz, 2H), 2.67 (dd,  $J=9.4$ , 6.4 Hz, 2H), 2.37 (s, 6H).  $^{13}\text{C}$  NMR (126 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  161.9, 151.5 (dd,  $J_{\text{C}-\text{F}}=248.2$ , 12.6 Hz), 150.7 (dd,  $J_{\text{C}-\text{F}}=252.0$ , 13.9 Hz), 146.0, 142.2, 138.4 (dd,  $J_{\text{C}-\text{F}}=6.3$ , 5.0 Hz), 129.8 (d,  $J_{\text{C}-\text{F}}=3.8$  Hz), 120.0 (d,  $J_{\text{C}-\text{F}}=17.6$  Hz), 117.6, 113.6 (dd,  $J_{\text{C}-\text{F}}=11.3$ , 1.3 Hz), 109.9, 94.4 (d,  $J_{\text{C}-\text{F}}=3.8$  Hz), 81.7 (d,  $J_{\text{C}-\text{F}}=3.8$  Hz), 61.3, 45.2, 33.2. LRMS (ESI) Calcd for  $\text{C}_{17}\text{H}_{16}\text{ClF}_2\text{N}_3$  [(M+H) $^+$ ]: 336.11, found: 336.28.

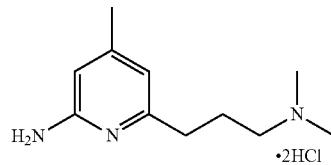
66



4-Chloro-6-((2,3-difluorobenzyl)oxy)pyridin-2-amine hydrochloride (68)

**[0348]** Compound 68 (pale yellow solid, 72 mg, 0.266 mmol, 73%) was prepared from 2,4-dichloro-6-(2,5-dimethyl-1H-pyrrol-1-yl)pyridine according to General Procedure G.  $^1\text{H}$  NMR (500 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  7.32-7.15 (m, 3H), 7.04 (s, 1H), 6.87 (s, 1H), 6.00 (s, 1H), 4.88 (s, 1H).  $^{13}\text{C}$  NMR (126 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  163.2, 157.6, 150.5 (dd,  $J_{\text{C}-\text{F}}=248.2$ , 12.6 Hz), 149.2 (dd,  $J_{\text{C}-\text{F}}=248.2$ , 12.6 Hz), 139.3, 132.7 (d,  $J_{\text{C}-\text{F}}=10.1$  Hz), 126.2 (dd,  $J_{\text{C}-\text{F}}=7.6$ , 3.8 Hz), 124.5 (t,  $J_{\text{C}-\text{F}}=3.8$  Hz), 118.3 (d,  $J_{\text{C}-\text{F}}=17.6$  Hz), 111.5, 109.0, 68.5. LRMS (ESI) Calcd for  $\text{C}_{12}\text{H}_{10}\text{ClF}_2\text{N}_2\text{O}$  [(M+H) $^+$ ]: 271.04, found: 271.72.

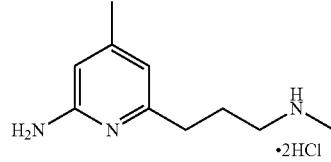
68



6-(3-(Dimethylamino)propyl)-4-methylpyridin-2-amine hydrochloride (69)

**[0349]** Compound 69 (brown solid, 172 mg, 0.890 mmol, 84%) was prepared from 81 according to General Procedure H.  $^1\text{H}$  NMR (500 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  6.72 (s, 2H), 3.28-3.20 (m, 2H), 2.93 (s, 6H), 2.84 (t,  $J=7.8$  Hz, 2H), 2.38 (s, 3H), 2.22-2.16 (m, 2H).  $^{13}\text{C}$  NMR (126 MHz,  $\text{CD}_3\text{OD}$ ):  $\delta$  159.1, 155.9, 148.5, 114.9, 111.3, 57.7 (2xC), 43.6, 30.3, 24.7, 22.0. LRMS (ESI) Calcd for  $\text{C}_{11}\text{H}_{20}\text{N}_3$  [(M+H) $^+$ ]: 194.17, found: 195.42.

70



4-Methyl-6-(3-(methylamino)propyl)pyridin-2-amine hydrochloride (70)

**[0350]** Compound 70 (brown solid, 202 mg, 1.13 mmol, 89%) was prepared from 81 according to General Procedure